

**REMARKS**

In the specification, the paragraph beginning on page 10, line 22 has been amended to correct a typographical problem.

Claims 1, 9, and 16 have been amended.

Claims 21, 22 and 23 have been canceled.

Claims 24-31 have been added.

Claims 1-20 and 24-31 are present in the subject application.

In the Office Action dated February 26, 2004, the Examiner rejected claims 16, 18 and 20-22 under 35 U.S.C. 102(b) and rejected claims 1-15, 17, 19 and 23 under 35 U.S.C. 103(a). Favorable reconsideration of the subject application is respectfully requested in view of the following remarks.

**Rejections under 35 U.S.C. §102(b)**

The Examiner has rejected claims 16, 18 and 20-22 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,000,353 (De Leu). Briefly, the De Leu patent discloses a pontoon raft having a hand-controlled steering mechanism and solar cells for powering an outboard electric motor. A seat of a chair having an adjustable back to form a raft interconnects a pair of pontoons to each other. Each pontoon has a flat, upward-facing surface used as an armrest, with one of the pontoons carrying a control panel. Both pontoons have photovoltaic cells located on the flat surfaces. The cells are connected either to a battery located within one of the pontoons or to the control panel. An electric motor with a propeller at the end of the vertical shaft is positioned rearward of the chair and is supported by a tube attached between the rear of the pontoons.

In contrast, the present invention is directed toward a solar powered watercraft including a pontoon section, a strut section, a body section, and a solar canopy section. The canopy section comprises a headliner layer, a ventilation space, and a panel that receives solar radiation. The pontoon section includes a pontoon having first and second sides, a forward terminal end, and an aft terminal end. The sides taper and intersect at one or both ends to form an edge (or edges) perpendicularly oriented to the body section. This configuration reduces water friction and wake. The pontoon further includes a recessed bay configured to receive a container that houses a battery pack. The container comprises a ventilation system that removes heat and gaseous byproducts from the container. The canopy comprises a frame to which solar panels and a headliner are attached. An area of ventilation exists between the headliner and panel layer. This area may be ventilated to remove hot gases and improve the performance of the panels.

The Examiner takes the position that the De Leu patent discloses all the features recited within the claims. This rejection, however, is respectfully traversed. Independent claim 16 has been amended to recite the features of a pontoon including an aft terminal end with sides that taper rearward (i.e., toward the aft portion) and downward, where these tapers converge and intersect at an edge. Dependent claims 21 and 22 have been canceled.

The De Leu patent does not disclose, teach, or suggest these features. Rather, the De Leu patent discloses a pontoon having a flat aft terminal end with a single, downward taper. *See* Figure 1. As can be seen, the front end of the pontoon does not include sides that taper rearward and downward to converge and intersect at an edge. Instead, it comprises rounded surface having a single, upward taper. Additionally, the aft end of the pontoon comprises a flat, slanted portion that extends from the top of the pontoon to the bottom of the pontoon (i.e., the part of the pontoon that contacts the water's surface). In other words, it includes a single, downward taper.

In contrast, the instant invention includes a pontoon having an aft terminal end including sides that taper rearward and downward to converge and intersect at an edge. This creates a water sealing edge that draws the water inward. This configuration reduces the surface area of water contacting the pontoon in comparison to a pontoon that lacks a dual taper, such as the one presented in the De Leu patent. Specifically, this configuration reduces drag and wake, regardless of the tilt of the watercraft. Thus, there is no disclosure, teaching, or suggestion of a pontoon for a watercraft including an aft terminal end with sides that taper downward and rearward to converge and intersect at an edge. Since the De Leu patent does not disclose, teach, or suggest the features recited within independent claim 16 as discussed above, this independent claim is considered to be in condition for allowance.

Claims 18 and 20 depend, either directly or indirectly, from independent claim 16 and, therefore, include all the limitations of their corresponding parent claim. These dependent claims are considered to be in condition for allowance at least for the same reasons discussed above in relation to their corresponding parent claims, and for further limitations recited in the claims.

Rejections under 35 U.S.C. §103(a)

The Examiner has rejected claims 1, 3, 7-10, 12, 13 and 15 under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 5,931,114 (Bartholomew) in view of U.S. Patent No. 5,016,558 (Oehler) and U.S. Patent No. 6,000,353 (De Leu). Briefly, the Bartholomew patent discloses a boat top comprised of one or more rigid panel members. Attached to the bottom face of the panel members is system including a series of T-tracks and body members that are adapted to slide along the tracks. The body members further include an adapter clip extending therefrom.

This system enables easy attachment and removal of the top from a boat. In addition, various accessories can be attached to either the top face or the bottom face of the boat top, such as a solar cell that can be used to charge the boat battery.

Next, the Oehler patent discloses a retractable roof for a boat. The boat comprises a catamaran boat including a body with fore and aft terminal ends. Two pontoons are disposed below the body. A generally horizontal roof is disposed above the body. The roof includes a plurality of rigid, lightweight frame bars carrying a cover. The frame is retractable to enable a user to diminish the height of the roof, thus permitting the boat to pass under an obstacle having low clearance. Finally, the De Leu patent discloses a solar powered raft as described above.

In contrast, the instant invention is directed toward a solar powered watercraft including a pontoon with sides that intersect and converge at an edge oriented perpendicular to the body of the watercraft as described above. The Examiner takes the position that it would be obvious to use the pontoon of the Oehler patent (as shown in Figures 1-3), secure a battery therein (as shown in Figures 1-2 of the De Leu patent), and then integrate the pontoon-with-battery system into the boat of the Bartholomew patent (as shown in Figures 1-2) including a removable roof and optional solar panel accessory. This rejection, however, is respectfully traversed. Independent claim 1 has been amended to recite the features of a pontoon including a first side, a second side, a forward terminal end, a center portion, and an aft terminal end, wherein the sides at each of the terminal ends intersect and converge to an edge oriented perpendicular to the deck.

None of the Bartholomew, Oehler, or De Leu patents disclose, teach, or suggest these features. Rather, Oehler and De Leu disclose pontoons having rounded forward terminal ends and flat aft terminal ends. In addition, Bartholomew discloses a boat including a hull, not pontoons. Specifically, as shown in Figure 1, the Oehler patent discloses a pontoon including a

flat aft terminal end and a rounded forward terminal end. The pontoon does not include terminal edges that taper to edge oriented perpendicular to the deck of the watercraft. Furthermore, De Leu, in Figure 1, discloses a pontoon including a rounded forward terminal end and a flat, slanted aft terminal edge. The aft terminal edge slants from the top of the pontoon to the bottom of the pontoon (i.e., the part of the pontoon that contacts the water's surface). In contrast, the instant invention includes a pontoon with first and second sides, a forward terminal end toward which said sides taper and intersect at a forward terminal edge, and an aft terminal end toward which said sides taper and intersect at an aft terminal edge, wherein both the forward and aft edges are oriented perpendicularly to the deck of the watercraft. The forward terminal end creates a water cutting edge that divides the water, while aft terminal end creates a water sealing edge that draws the water inward. This configuration reduces the surface area of water contacting the pontoon when compared to a pontoon that lacks this configuration, such as the one presented in the Oehler and De Leu patents. Thus, there is no disclosure, teaching or suggestion of a watercraft including a deck supported above a pontoon, wherein the pontoon includes first and second sides that taper at terminal ends to converge and intersect at an edge oriented perpendicularly to the deck.

Additionally, there is no disclosure in any of the Bartholomew, Oehler, or De Leu patents providing proper motivation for combining the references as asserted in the Examiner's position. Bartholomew does not disclose, teach, or suggest that the hull of its boat may be replaced with a pontoon structure; moreover, there is no motivation provided in Oehler for adding pontoons to a hulled watercraft. Furthermore, De Leu does not disclose, teach or suggest that placing a battery in one pontoon of a raft including a chair disposed between two pontoons, wherein the pontoon is designed for pool use (not open water), will provide more stability to the raft. It, moreover,

does not disclose, teach, or suggest that placing a battery in a pontoon will stabilize a full-sized watercraft such as that disclosed in Oehler including a deck disposed above (not between) pontoons and designed for open water. The placement of a battery in one pontoon, in fact, would serve to destabilize the raft, particularly with regard to waves approaching from the sides of the craft.

Since the Oehler, Bartholomew, and De Leu patents do not disclose, teach, or suggest the features recited within independent claim 1 as discussed above, this independent claim is considered to be in condition for allowance.

Claims 3, 7-10, 12, 13, and 15 depend, either directly or indirectly, from independent claim 1 and, therefore, include all the limitations of their corresponding parent claim. Furthermore, none of the cited references teach or suggest the features of a monocrystalline or polycrystalline solar panel as recited in claim 8, a pontoon having an aft terminal end with sides that taper downward and rearward to converge at an edge as recited in claim 9, a centerline of flotation as recited in claim 10, a control console including ventilation means as recited in claim 13, or an aft oriented trim as recited in claim 15. Examiner takes the position that an aft oriented trim results from the placement of the battery at the stern of the raft in the De Leu patent. However, an aft oriented trim is not taught or suggested. In addition, any weight displacement caused by the placement of battery near the stern of one pontoon would be offset by the weight of the control panel located near the front of the starboard pontoon, the weight of the television and other entertainment items located near the front of the port pontoon, and the solar panels disposed near the front of both pontoons.

Claims 3, 7-10, 12, 13, and 15 are considered to be in condition for allowance for at least the same reasons discussed above in relation to their corresponding parent claims, and for further limitations recited in the claims.

The Examiner has rejected claim 2 under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 5,931,114 (Bartholomew) in view of U.S. Patent No. 5,016,558 (Oehler) and U.S. Patent No. 6,000,353 (De Leu), in further view of U.S. Patent No. 6,263,826 (Key). Briefly, the Bartholomew patent discloses a removable boat top as described above, the De Leu patent discloses a solar powered raft as described above, and the Oehler patent discloses a retractable roof for a boat as described above. The Key patent discloses a sprinkler for a boat canopy. The canopy is held in place by a frame including an upper member that is supported by lateral frame members attached to the sides of boat. The frame members define a hollow interior channel that provides a passageway along the interior of the frame. The canopy frame further includes an opening to which a nozzle is attached. The free end of the nozzle is configured to direct streams of water upwardly into the air. The water streams are generated using a pump connected to a battery, both of which are located on the deck of the boat. In contrast, the instant invention is directed toward a solar powered watercraft including shaped pontoons as described above.

The Examiner takes the position that it would be obvious to modify the combined references of Bartholomew, De Leu, and Oehler by attaching a battery pack to the exterior of a pontoon as shown in Figure 1 of the Key patent. This rejection, however, is respectfully traversed. Initially, this claim depends, either directly or indirectly, from independent claim 1 and, therefore, includes all the limitations of its corresponding parent claim. As discussed above, the Bartholomew, De Leu, or Oehler patents do not disclose, teach, or suggest the features of a

watercraft including a deck disposed above a pontoon, wherein the pontoon includes first and second sides, a forward terminal end toward which said sides taper and intersect at a forward terminal edge, and an aft terminal end toward which said sides taper and intersect at an aft terminal edge, wherein both the forward and aft edges are oriented perpendicularly to the deck of the watercraft as recited in the claims. Thus, these claims are considered to be in condition for allowance for at least the same reasons discussed above in relation to their parent claims, and for further limitations recited in the claims.

The Key patent does not compensate for the deficiencies of the Bartholomew, De Leu, and Oehler patents and similarly does not disclose, teach, or suggest these features. Rather, it discloses a battery mounted to the deck of a boat including pontoons with flat aft terminal edges. *See* Figures 1 and 4. As can be seen, the aft terminal edges of the boat pontoons are flat. They do not include an edge oriented perpendicularly to deck of the boat. The battery, moreover, is mounted to the deck of the boat and not to the exterior surface of a pontoon as asserted. Consequently, there is no disclosure, teaching or suggestion of a watercraft including (1) a pontoon with first and second sides tapering and intersecting at edges oriented perpendicularly to the deck of the watercraft or, for that matter, (2) a battery pack mounted to the exterior of the pontoon as recited in the claims.

Since the Bartholomew, De Leu, Oehler, and Key patents do not disclose, teach or suggest, either alone or in combination, the features recited in claim 2 as discussed above, this claim is considered to be in condition for allowance

The Examiner has rejected claims 4-6 under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 5,931,114 (Bartholomew) in view of U.S. Patent No. 5,016,558 (Oehler) and U.S. Patent No. 6,000,353 (De Leu), in further view of U.S. Patent No. 5,725,062 (Fronek).



Briefly, the Bartholomew patent discloses a removable boat top, the De Leu patent discloses a solar powered raft, and the Oehler patent discloses a retractable roof for a boat, each as described above. The Fronck patent discloses a solar power generator that attaches to the top of a vehicle such as a golf cart or boat. It includes a frame with solar panels attached thereto. The frame further includes mounting brackets to enable the frame's attachment to the rooftop of a vehicle. A protective cover is placed over the solar panels to protect the panels from dust, etc. A space exists within the photovoltaic frame (between the panels and the bottom of the frame), as well as between the frame and the vehicle top. Attached to the bottom of the frame is a cooling fan that generates a flow of air over the surfaces of the solar panels and between the vehicle top and the photovoltaic frame. In contrast, the instant invention is directed toward a solar powered watercraft including shaped pontoons as described above.

The Examiner takes the position that it would be obvious to modify the combined patents of Bartholomew, De Leu, and Oehler by incorporating the solar power generator as shown in Figure 1 and column 3 of Fronck. This rejection, however, is respectfully traversed. Initially, these claims depend, either directly or indirectly, from independent claim 1 and, therefore, include all the limitations of their corresponding parent claim. As discussed above, the Bartholomew, De Leu, and Oehler patents do not disclose, teach, or suggest the features of a watercraft including a deck disposed above a pontoon, wherein the pontoon includes first and second sides, a forward terminal end toward which said sides taper and intersect at a forward terminal edge, and an aft terminal end toward which said sides taper and intersect at an aft terminal edge, wherein both the forward and aft edges are oriented perpendicularly to the deck of the watercraft as recited in the claims. Thus, these claims are considered to be in condition for

allowance for at least the same reasons discussed above in relation to their parent claim, and for further limitations recited in the claims.

Fronek does not compensate for the deficiencies of the Bartholomew, De Leu, and Oehler patents and similarly does not disclose, teach or suggest these features. Rather, the Fronek patent discloses a solar power generator including mounting brackets that enable the frame of the generator to be attached to the rooftop of a vehicle (e.g., See Column 2, lines 46 to 53). The generator does not comprise the canopy of the vehicle; instead, it as an accessory that requires a vehicle top (i.e., a canopy) for its use. See, e.g., col. 3, lines 5-17. In contrast, the current invention is directed towards a solar canopy that comprises the roof structure of the vehicle, i.e., it does not require a rooftop for its use. The vehicle top disclosed by Fronek, moreover, does not include a headliner layer and solar panels attached to a frame as recited in the claims. Consequently, there is no disclosure, teaching or suggestion of a watercraft including a pontoon comprising terminal ends with sides that taper to converge and intersect at an edge oriented perpendicularly to the deck of the watercraft or, for that matter, a battery pack mounted to the exterior of a pontoon, wherein the battery is connected to a canopy including a headliner, a ventilation space, and a solar panel as recited in the claims. Since the Bartholomew, De Leu, Oehler, and Fronek patents do not disclose, teach or suggest, either alone or in combination, the features recited in claims 4-6 as discussed above, these claims are considered to be in condition for allowance.

The Examiner has rejected claims 11 and 14 under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 5,931,114 (Bartholomew) in view of U.S. Patent No. 5,016,558 (Oehler) and U.S. Patent No. 6,000,353 (De Leu), in further view of U.S. Patent No. 4,991,532 (Locke). Briefly, the Bartholomew patent discloses a removable boat top as described

above. The De Leu patent discloses a solar powered raft as described above. The Oehler patent discloses a retractable roof for a boat as described above. The Locke patent discloses an automatic fan controller that energizes a ventilation fan motor to eliminate fuel fumes from an engine compartment located in the hull of a motorboat. The controller includes a relay that provides electrical power to the motor of the fan. The relay, in turn, is controlled by an electronic circuit responsive to engine ignition circuit pulses that operates the fan whenever the engine speed is below a desired value. Additionally, a temperature-controlled switch may be provided to energize the relay and energize the fan motor. In contrast, the instant invention is directed toward a solar powered watercraft including shaped pontoons as described above.

The Examiner takes the position that it would be obvious to modify the combined patents of Bartholomew, De Leu, and Oehler by adding the engine ventilation system shown in Locke Figure 1, to prevent the accumulation of fumes within a container housing the battery pack. This rejection, however, is respectfully traversed. Initially, these claims depend, either directly or indirectly, from independent claim 1 and, therefore, include all the limitations of its corresponding parent claim. As discussed above, the Bartholomew, De Leu, or Oehler patents do not disclose, teach, or suggest the features of a watercraft including a deck disposed above a pontoon, wherein the pontoon includes first and second sides, a forward terminal end toward which said sides taper and intersect at a forward terminal edge, and an aft terminal end toward which said sides taper and intersect at an aft terminal edge, wherein both the forward and aft edges are oriented perpendicularly to the deck of the watercraft as recited in the claims. Thus, these claims are considered to be in condition for allowance for at least the same reasons discussed above in relation to their parent claim and for further limitations recited in the claims.

Locke does not compensate for the deficiencies of the Bartholomew, De Leu, and Oehler patents and similarly does not disclose, teach or suggest these features. Specifically, the Locke patent does not disclose a battery ventilation system for use in a container mounted to a pontoon. Rather, the Locke patent discloses a hulled boat including an engine compartment with a fan that generates a flow of air whenever the engine speed is below a certain level or whenever the engine temperature reaches a certain level (e.g., See Column 1, line 50 to Column 4, line 25). One skilled in the art would not place the entire engine compartment in the pontoon structures shown in De Leu or Oehler. In addition, Locke does not disclose, teach, or suggest that its ventilation system functions to vent gaseous byproducts formed by a battery. As such, there is no disclosure, teaching or suggestion of a watercraft including a pontoon comprising terminal ends that taper to an edge oriented perpendicularly to the deck of the watercraft or, for that matter, a battery pack positioned near the flotation centerline of a pontoon, wherein battery pack is housed in a container that includes an air inlet and an air outlet as recited in the claims. Additionally, claim 14 does not depend from claim 11; consequently, the air ventilation means does not further limit the battery back containing means as recited in claim 11.

Since the Bartholomew, De Leu, Oehler, and Locke patents do not disclose, teach or suggest, either alone or in combination, the features recited in claims 11 and 14 as discussed above, these claims are considered to be in condition for allowance.

The Examiner has rejected claim 17 under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 6,000,353 (De Leu) in view of U.S. Patent No. 6,263,826 (Key). Briefly, the De Leu patent discloses a solar powered raft as described above. The Key patent discloses a sprinkler system for a boat canopy as described above. In contrast, the instant invention is

directed toward a pontoon including an aft terminal end with rearward and downward tapers that converge to an edge as described above.

It is the examiner's position that it would be obvious to modify the raft shown in Figure 1 of De Leu by mounting a battery pack to the exterior surface of a pontoon as shown in Figure 1 of the Key patent for the purpose of facilitating the installation of the battery pack on said pontoon. This rejection, however, is respectfully traversed. Initially, this claim depends, either directly or indirectly, from independent claim 16 and, therefore, includes all the limitations of its corresponding parent claim. As discussed above, De Leu does not disclose, teach or suggest a pontoon for a watercraft including an aft terminal end with sides that taper downward and rearward to converge and intersect at an edge. Thus, this claim is considered to be in condition for allowance for at least the same reasons discussed above in relation to its parent claim, and for further limitations recited in the claim.

The Key patent does not compensate for the deficiencies of the De Leu patent and similarly does not disclose, teach or suggest these features. Rather, it discloses a battery mounted to the deck of a boat including pontoons with flat aft terminal edges. *See* Figures 1 and 4. As can be seen, the aft terminal edges of the boat pontoons are flat. They do not include sides that taper rearward and downward to converge at an edge. The battery, moreover, is mounted to the deck of the boat and not to the exterior surface of a pontoon as asserted. Consequently, there is no disclosure, teaching or suggestion of a watercraft including (1) a pontoon with first and second sides including an aft terminal end wherein the sides taper rearward and downward to converge at an edge or, for that matter, (2) a battery pack mounted to the exterior of the pontoon as recited in the claims.

Since the De Leu and Key patents do not disclose, teach or suggest, either alone or in combination, the features recited in claim 17 as discussed above, this claim is considered to be in condition for allowance.

The Examiner has rejected claim 19 under 35 U.S.C §103(a) as being unpatentable over U.S. Patent No. 6,000,353 (De Leu) in view of U.S. Patent No. 4,991,532 (Locke). Briefly, the De Leu patent discloses a solar powered raft as described above. The Locke patent discloses an automatic controller for a ventilation fan used in an engine compartment as described above. In contrast, the instant invention is directed toward a pontoon for a watercraft including a dual tapered aft terminal end as described above.

It is the Examiner's position that it would have been obvious to modify the raft of De Leu as shown in Figure 1 by adding the engine ventilation system shown in Figure 1 of Locke for the purpose of providing ventilation to prevent the accumulation of fumes within the pontoon housing the battery pack. This rejection, however, is respectfully traversed. Initially, this claim depends, either directly or indirectly, from independent claim 16 and, therefore, includes all the limitations of its corresponding parent claim. As discussed above, De Leu does not disclose, teach or suggest a pontoon for a watercraft including an aft terminal end with sides that taper downward and rearward to converge and intersect at an edge. Thus, this claim is considered to be in condition for allowance for at least the same reasons discussed above in relation to its parent claim, and for further limitations recited in the claim.

Locke does not compensate for the deficiencies of the De Leu patent and similarly does not disclose, teach or suggest these features. The Locke patent does not disclose a battery ventilation system for use in a battery container mounted on a pontoon. Rather, the Locke patent discloses a hulled boat including an engine compartment with a fan that generates a flow of air

whenever the engine speed is below a certain level, or whenever the engine temperature reaches a certain level (e.g., See Column 1, line 50 to Column 4, line 25). One skilled in the art would not place an entire engine compartment into the pontoon structures shown in De Leu or Oehler. In addition, Locke does not disclose, teach, or suggest that its ventilation system also is useful in venting gaseous byproducts formed by a battery. Thus, there is no disclosure, teaching or suggestion of a watercraft including a pontoon comprising a first side and a second side, wherein the sides of the aft terminal end taper rearward and downward to intersect at an edge or, for that matter, a battery pack mounted to the a pontoon, wherein the container that houses the battery pack includes ventilation ports as recited in the claims. Since the De Leu and Key patents do not disclose, teach or suggest, either alone or in combination, the features recited in claim 17 as discussed above, these claims are considered to be in condition for allowance.

In addition to the foregoing, it would not be obvious to combine the Bartholomew patent with the De Leu, Oehler, Key, Fronek, or Locke patents to obtain the claimed invention. Briefly, the Bartholomew patent discloses a removable boat top as described above, while the De Leu patent discloses a raft as described above. The Bartholomew patent is concerned with providing a boat top that can be attached to various types of full-sized watercrafts, disclosing only hulled boats. The Oehler patent is directed toward a retractable roof for a pontoon boat as described above, and is concerned with enabling a boat to pass below obstacles having low clearance (such as bridges). It is not concerned with adding solar cells to a boat top or modifying a hulled ship by replacing the hull with pontoons. Thus, these patents are concerned with divergent teachings and there is no apparent reason to combine those teachings other than prohibited hindsight derived from Applicants' own disclosure. In addition, one skilled in the art would not look to alter the hulled structure disclosed by Bartholomew with the pontoon structure of Oehler.

Neither patent includes appropriate motivation for doing so. Accordingly, the proposed combination of the Bartholomew and Oehler patents does not tender the claimed invention obvious.

The De Leu patent is directed toward an open-top, solar-powered raft including a chair positioned between two pontoons as described above. It is concerned with providing a single-person raft for use in a pool and having limited power capacity. It is not concerned with providing a power system for full-sized boats that navigate open waters such as lakes. Thus, these patents are concerned with divergent teachings and there is no apparent reason to combine those teachings other than prohibited hindsight derived from Applicants' own disclosure. Accordingly, the proposed combination of the Bartholomew, Oehler, and De Leu patents does not tender the claimed invention obvious.

The Fronek patent discloses a solar power generator as described above. It employs brackets that enable attachment of the generator to the rooftop of a variety of vehicles. It is concerned with providing an accessory that attaches to the roof of a vehicle, and not with functioning as the roof of the vehicle itself (i.e., as the canopy). Consequently, one skilled in the art would not be motivated to replace the roof structures of the Bartholomew or Oehler patents with the attaching accessory disclosed by Fronek. These patents are concerned with divergent teachings and there is no apparent reason to combine those teachings other than prohibited hindsight derived from Applicants' own disclosure. Accordingly, the proposed combination of the Bartholomew, Oehler, De Leu, and Fronek patents does not tender the claimed invention obvious.

The Locke patent discloses an engine compartment for a motorboat as described above. This patent employs a fan to ventilate the compartment whenever certain conditions are met e.g.,



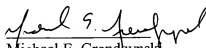
when the engine speed drops below a certain level or the temperature in the compartment rises above a certain level. It is concerned with removing gases from the engine compartment of a hulled ship caused by the running of the engine. There is no mention of or concern for battery fume ventilation. Furthermore, neither the Bartholomew patent nor the Oehler patent discloses, teaches, or suggests the desirability of providing ventilation to its engines. Bartholomew and Oehler are both directed toward boat tops. Thus, these patents are directed toward divergent teachings and there is no apparent reason to combine those teachings absent prohibited hindsight derived from Applicants' own disclosure. Moreover, one skilled in the art would not look to the engine compartment ventilation system of Locke to modify the structures of Bartholomew or De Leu, which do not include engine compartments (i.e., both disclose open-air motors), or to modify the structure of Oehler, which does not disclose, teach or suggest the existence of an engine or an engine compartment. Accordingly, the proposed combination of the Locke, Oehler, De Leu, and Bartholomew patents does not tender the claimed invention obvious.

The Key patent discloses a pontoon boat including a sprinkler system as described above. The patent employs a pump located on the deck of the boat to propel water through the sprinkler and is not concerned with providing a boat with a removable top. Thus, the Bartholomew and Key patents are directed toward divergent teachings and there is no apparent reason to combine those teachings absent prohibited hindsight derived from Applicants' own disclosure. In addition, one of ordinary skill in the art would not be motivated to modify the structure of Bartholomew, Oehler, or De Leu by placing a battery on the pontoon of Oehler, since none of the references teach placing a battery on a pontoon. Accordingly, the proposed combination of the Key, De Leu, and Bartholomew patents does not tender the claimed invention obvious.

New claims 24-31 include further features not disclosed in any of the cited references. Specifically, none of the references include the feature of pontoon including a vertical centerline of flotation comprising a point along the pontoon located halfway between a forward point where the diameter is 75% of the full pontoon diameter and an aft point where the diameter is equal to or greater than 80% of the full pontoon diameter (claims 24, 25, and 28); a pontoon including a battery bay configured to receive a container that houses a battery pack, wherein the battery pack intersects the pontoon's centerline of flotation (claims 27); a control console located on the deck of a watercraft including a fan that ventilates both the control console and the container mounted to a pontoon that houses a battery (claim 29); or a canopy including a frame with an open channel and, attached thereto, an uppermost solar panel layer and a lower headliner layer, wherein the headliner layer is attached to the open channel and wherein a ventilation space exists between the solar panel layer and the headliner layer (claims 30-31).

The application, having been shown to overcome issues raised in the Office Action, is considered to be in condition for allowance and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

  
Michael E. Grendzynski  
Registration No. 54,790

EDELL, SHAPIRO & FINNAN, LLC  
1901 Research Boulevard, Suite 400  
Rockville, Maryland 20850-3164  
(301) 424-3640

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